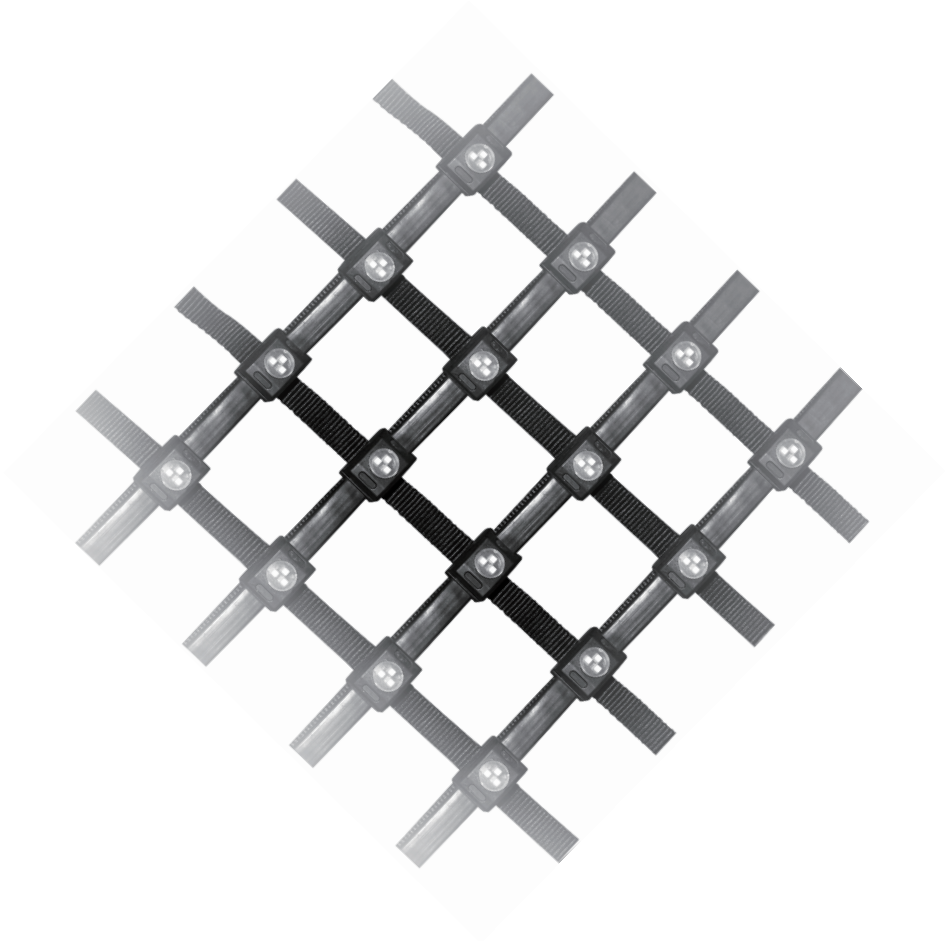
ROE

User Manual

Dot-D75/D150



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01 Safety Information:

WARNING!
Read the safety precautions in this section before installing, powering, operating or servicing this product.

The following symbols are used to identify important safety information on the product and in this manual:

WARNING!
Safety hazard. Risk of severe injury or death.

WARNING!
Refer to manual before installing, powering or servicing.

WARNING!
Hazardous voltage. Risk of lethal or severe electric shock.

WARNING!
Hot surface. Do not touch.

WARNING!
Fire hazard.

WARNING!
Emission hazardous to eyesight.

This product is for professional use only. It is not for household use.

This product presents risks of severe injury or death due to fire hazards, electric shock and falls.

Read this manual before installing, powering or servicing this product, follow the safety precautions listed below and observe all warnings in this manual and printed on the product.

If you have questions about how to operate the panel safely, please contact your Radiant supplier.

PROTECTION FROM ELECTRIC SHOCK

· Connect the product to AC mains power within the range 90- 264 V nominal at 50 or 60 Hz only.

· Disconnect the product from power when not in use.

· Always ground (earth) the product electrically.

· Before using the product, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.

· Do not use the product if the power cable or a power plug is in any way damaged, defective or showing signs of overheating.

· Do not attempt to open any cover.

· Refer any service operation not described in this manual to a qualified technician.

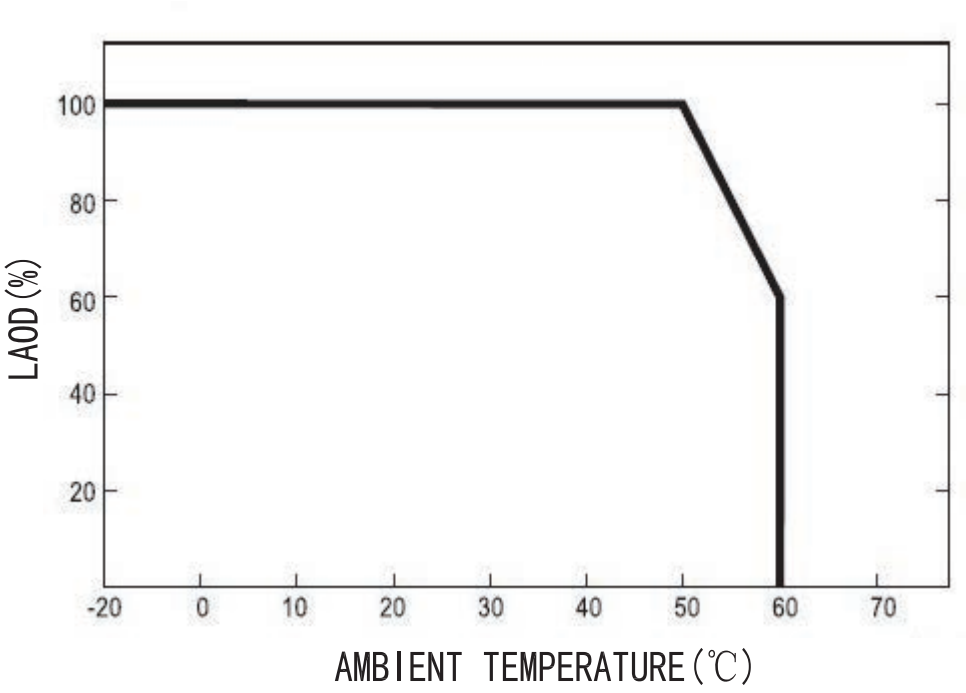
PROTECTION FROM FIRE

Do not stick filters, masks or other materials directly onto LED modules.

Do not modify the product in any way not described in this manual.

Install only genuine Radiant parts in or on the product unless an alternative is described in this manual.

Do not operate the product full load if the ambient temperature of power units (Ta) exceeds 60˚C (140° F).



PROTECTION FROM INJURY

Create an installation by installing panels at the top and working downwards. Disassemble an installation by removing panels at the bottom and working upwards.

Check that all external covers and rigging hardware are securely fastened.

Block access below the work area and work from a stable platform whenever installing, servicing or moving the product.

Important warnings

Maximum and minimum ambient temperature:
The maximum ambient temperature for the LED wall is 60 °C; the minimum temperature is -20 °C.

High leakage current:
The combination of power boxes in an installation results in increased levels of Leakage current. In order to avoid risk of electric shock due to high leakage current, proper grounding of the installation is required.

This equipment MUST be earthed:
In order to protect against risk of electric shock, the installation should be properly grounded. Defeating the purpose of the grounding type plug will expose you to the risk of electric shock.

Power system

Mains cords:
The power cords delivered with this system have special properties for safety. They are not user Serviceable. If the power cords are damaged, replace them only with new ones. Never try to repair a power cord.

Data cables:
The data cables provided with this system have special properties for safety. They are not user serviceable. If the data cables are damaged, replace them only with new ones. Never try to repair a data cable. Per requirements of the National Electrical Code® in the USA, the length of a data cable must not exceed 100 m (332 feet). Avoid exposure of data cables to accidental contact with lightning or power conductors.

Dot LED mesh cannot be hot swapped:
Always disconnect the power cord from the control box before connecting or disconnecting the cable string or one of Dot LED mesh.

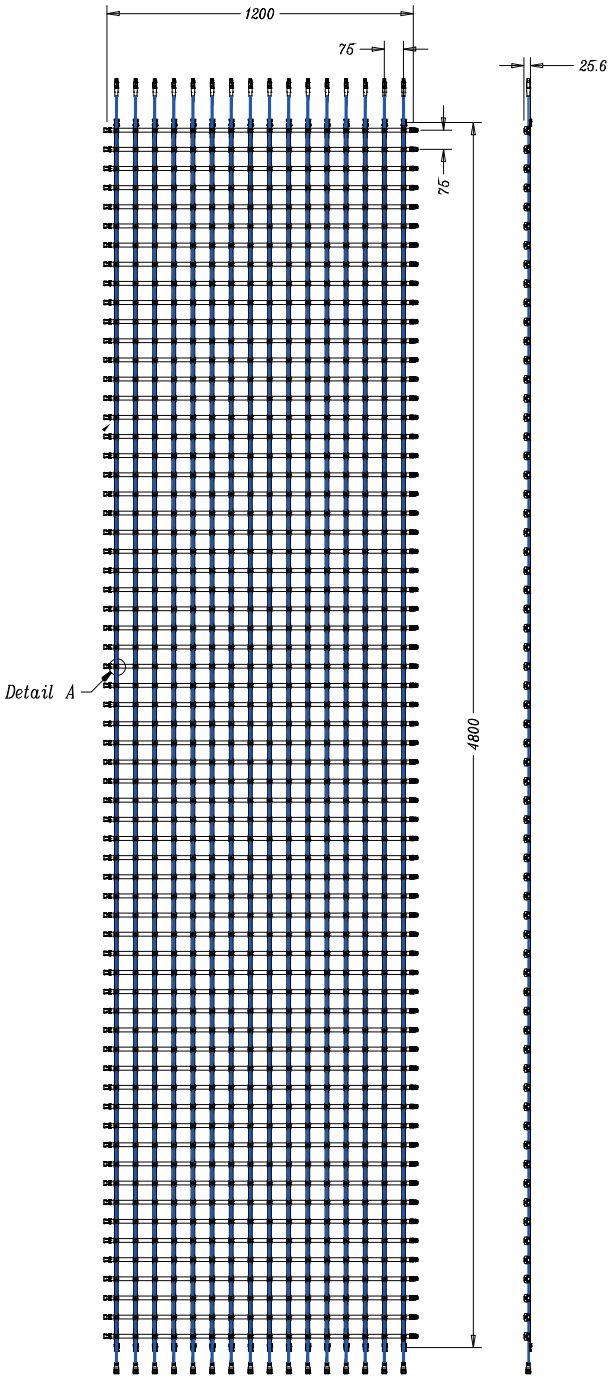
02 Specification:

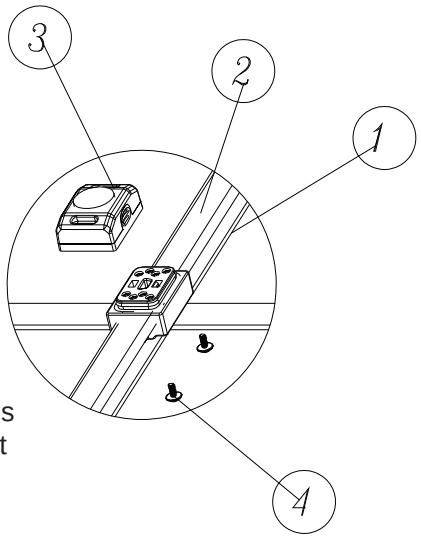
The Soft Screen units are composed by a number of soft LED strip with RGB pixels which include 3 RGB LED. It provides unlimilted flexibility and new creative possibilities for designers when it comes to displaying low resolution visual effects. Panels clip together on all four sides and can even be joined over distances using separately available interlinking cables, enabling the display area to be quickly and easily re-configured to fit almost any stage height, length or custom shape.

Dot-D75 Specification:

Pixel Pitch	75mm
LED Type	3in1 SMD
Brightness(Nit or CD/m^2)	Cree 3435,1200/Silan3535,1000
Transparency	60%
Module Size(mm) W×H×D	1200.0×4800.0×25.6
Module Area	5.76m^2
Pixels/Module	16 × 64
Pixels/m^2	178
Viewing Horizontal/Vertical	160 °
Weight/Module	36kg/79.37lbs
IP（Front/Reverse）	IP65
Color Depth	16 bit
Processing	1280×1024
Scan	Static
Refresh Rate	4500Hz
Max Power/Module	900W
Working Temperature	-20 to 45℃

Dot-D75 Dimensions:





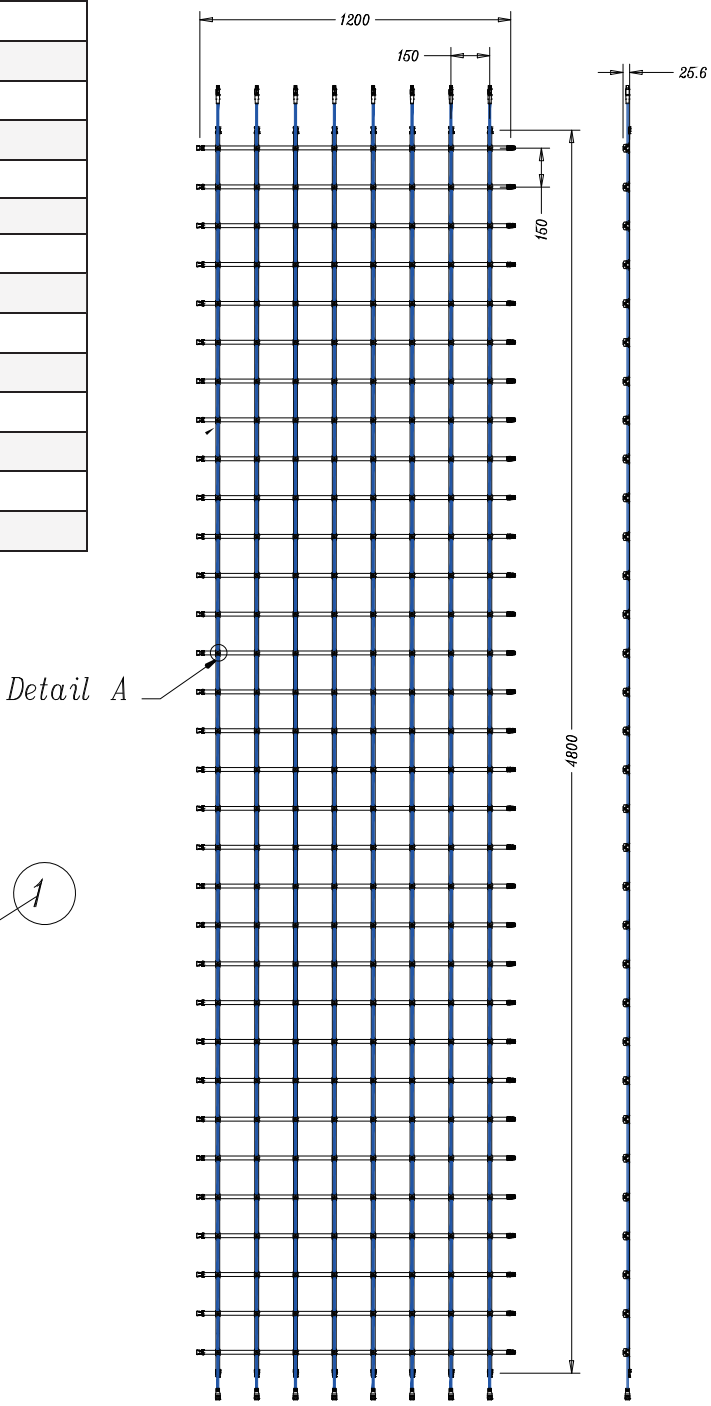
1.Cloth strip
2.Power and signal lines
3.RGB pixel component
4.Screw

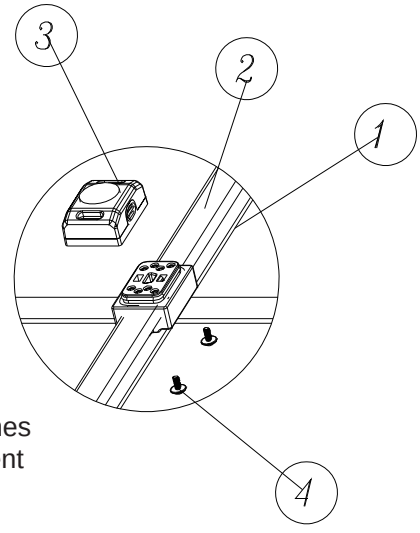
Detail A

Dot-D150 Specification:

Pixel Pitch	150mm
LED Type	3in1 SMD
Brightness(Nit or CD/m^2)	Cree 3435,300/Silan3535,250
Transparency	80%
Module Size(mm) W×H×D	1200.0×4800.0×25.6
Module Area	5.76m²
Pixels/Module	8 × 32
Pixels/m^2	44
Viewing Horizontal/Vertical	160 °
Weight/Module	9.6kg/21.16lbs
IP（Front/Reverse）	IP65
Color Depth	16 bit
Processing	1280×1024
Scan	Static
Refresh Rate	4500Hz
Max Power/Module	210W
Working Temperature	-20 to 45℃

Dot-D150 Dimensions:

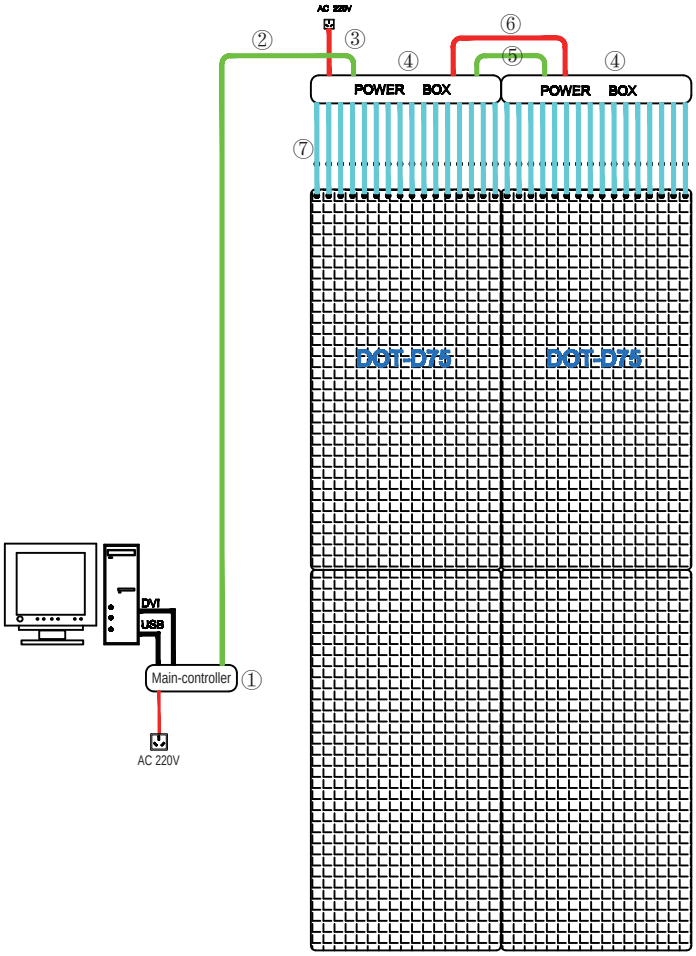


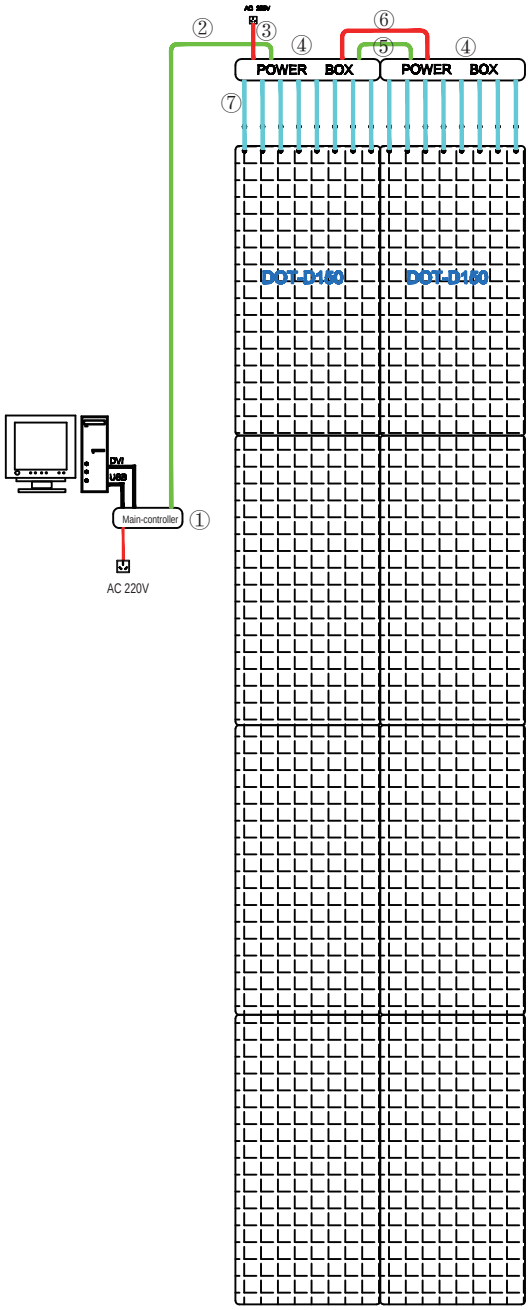


1.Cloth strip
2.Power and signal lines
3.RGB pixel component
4.Screw

Detail A

03 Connection:





Accessories quantity for tiles:

(Dot-D75 1*2)

①. 1× Sending card (SDR-30001)
1× DVI cable
1× USB cable
②. 1× CAT-5 (CAT-30002)
③. 1× Power cable(PWC-23004)
④. 2× Power box (PSU-22001)
⑤. 1× CAT-5 (CAT-02002)
⑥. 1× Power cable (PWC-20203)
⑦. 16× Data cable (DAC-20001)

Accessories quantity for tiles:

(Dot-D150 1*4)

①. 1× Sending card (SDR-30001)
1× DVI cable
1× USB cable
②. 1× CAT-5 (CAT-30002)
③. 1× Power cable(PWC-23004)
④. 2× Power box (PSU-12001)
⑤. 1× CAT-5 (CAT-02002)
⑥. 1× Power cable (PWC-20203)
⑦. 8× Data cable(DAC-20001)

04 Accessories

Name : CAT-5
Part No. : CAT-30002
Dimesion : 30m
Weight : 1.3kg

Name : CAT-5
Part No. : CAT-02002
Dimesion : 2m
Weight : 0.3kg

Name : Data Cable
Part No. : DAC-20001
Dimesion : 2m
Weight : 0.3kg

Name : Power Cable
Part No. : PWC-20203
Dimesion : 2m
Weight : 0.4kg
Max Current : 20A

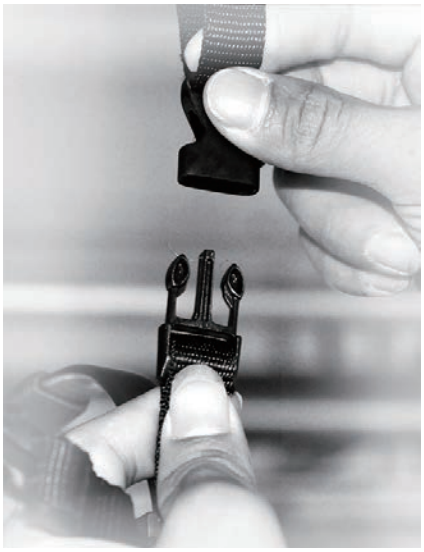
Name : Power Cable
Part No. : PWC-23004
Dimesion : 30m
Weight : 1.5kg
Max Current : 20A

Name : Hanging Tape
Part No. : RIG-00001
Dimesion : 0.5m
Weight : 0.1kg
Max Capacity : 20kg

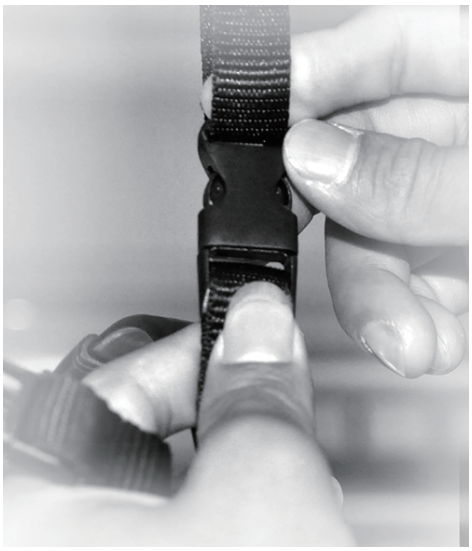
05 Physical Connection:

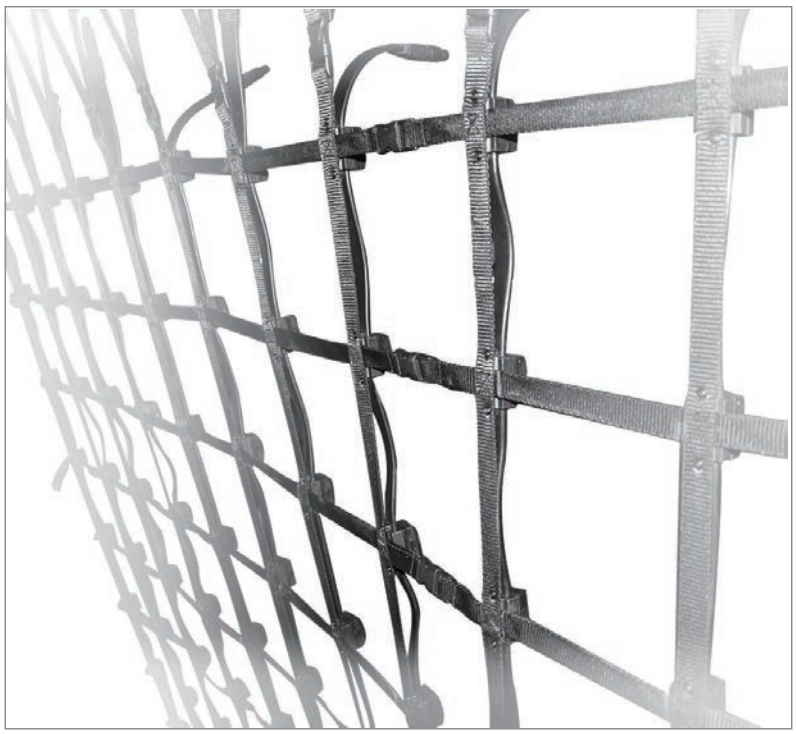
Straight and horizontal installation

Step 1:



Step 2:





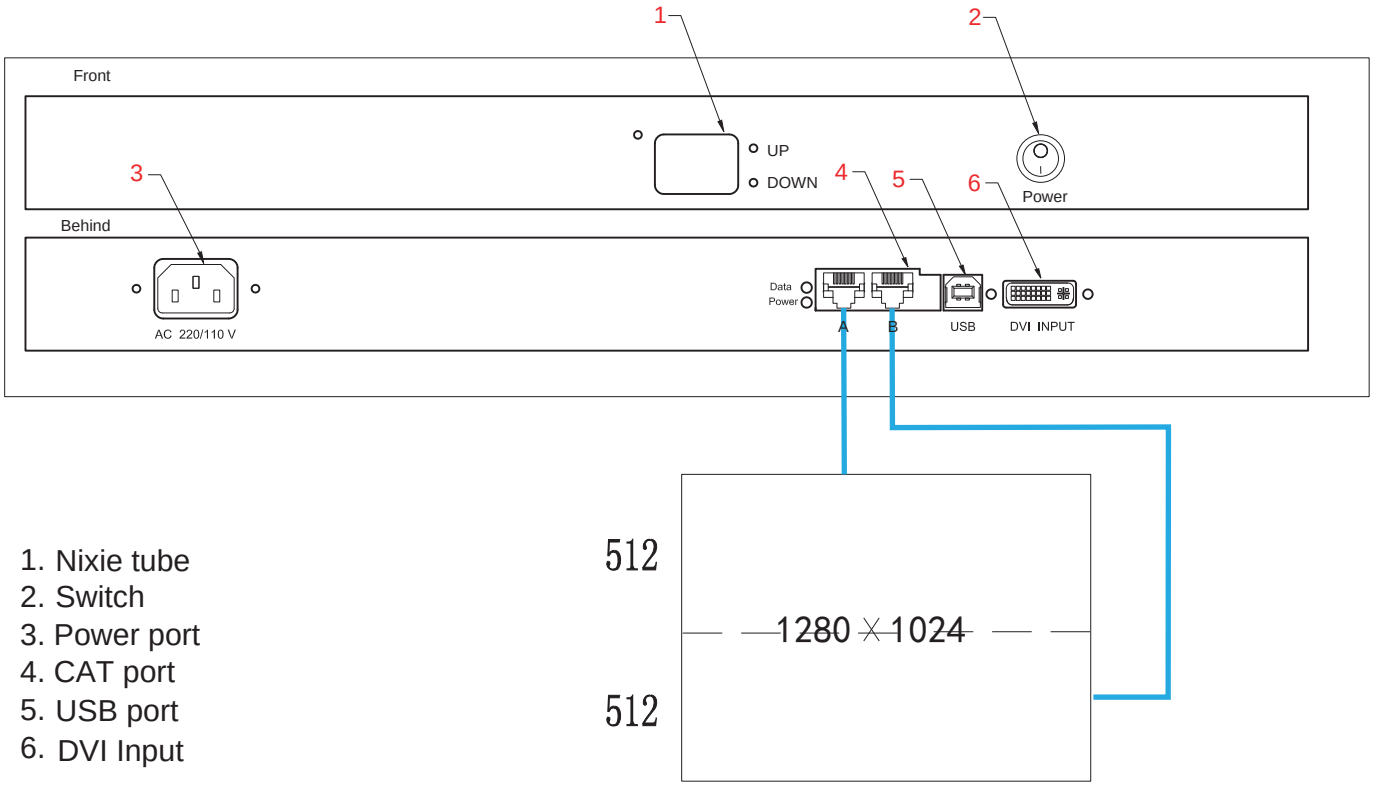
06 Control System:

The control system of Dot series consist of receiving card and sending card.Receiving card is integated with power supply.

Specification

Working voltage	90～260VAC
Power	＜10W
Working temperature	-10℃～ 50℃
Input port	DVI
Output ports number	2 ports
Communication port	USB/RJ45
Max resolution	1280x1024
Data transmission port	1000M Ethernet
Material	SPCC
Dimension	L 136.35 x W 99.9
Weight	1.47kg

Main controller (SDR-30001)



1. Nixie tube
2. Switch
3. Power port
4. CAT port
5. USB port
6. DVI Input

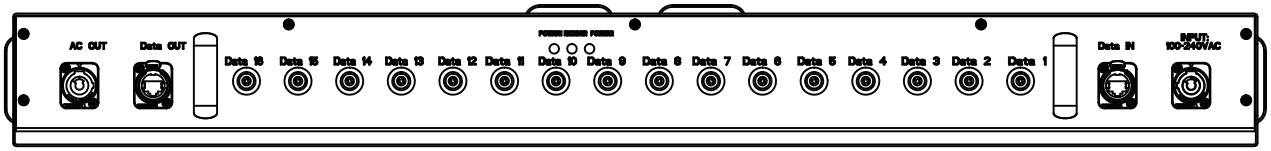
Software:

Please read software manual or download from the link as below:

Dot-D75 power box

Specification	
Working Voltage	100~240VAC
Power Output	2000W
Working Temperature	-20℃~ 60℃
Mounting	Fixed on head
Max Capacity	2 tiles
Material	SPCC
Dimension	L 850.0 x W 267.0 x H 93.0mm
Weight	13.3kg
IP	IP65

Power box (PSU-22001)

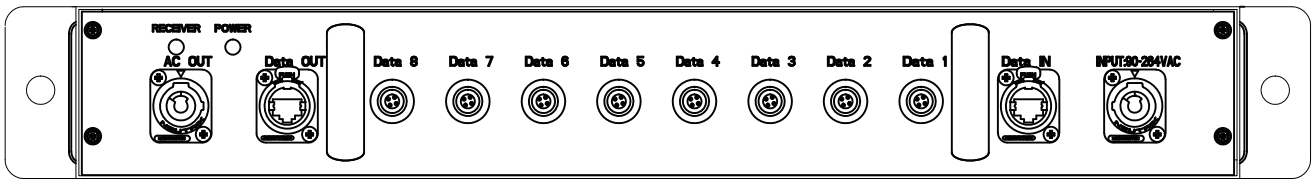


Power box (PSU-22001)

Dot-150 power box

Specification	
Working Voltage	100~240VAC
Power Output	1000W
Working Temperature	-20℃~ 60℃
Mounting	Fixed on head
Max Capacity	4 tiles
Material	SPCC
Dimension	L 553.0 x W 222.0 x H 73.0mm
Weight	6.95kg
IP	IP65

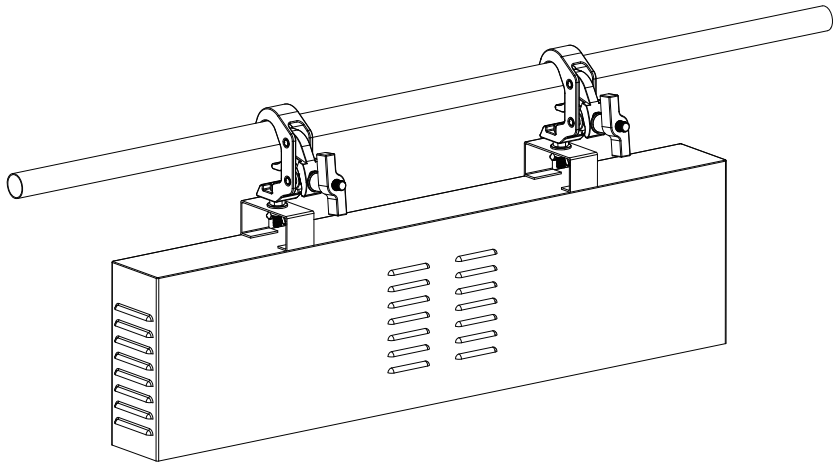
Power box (PSU-12001)



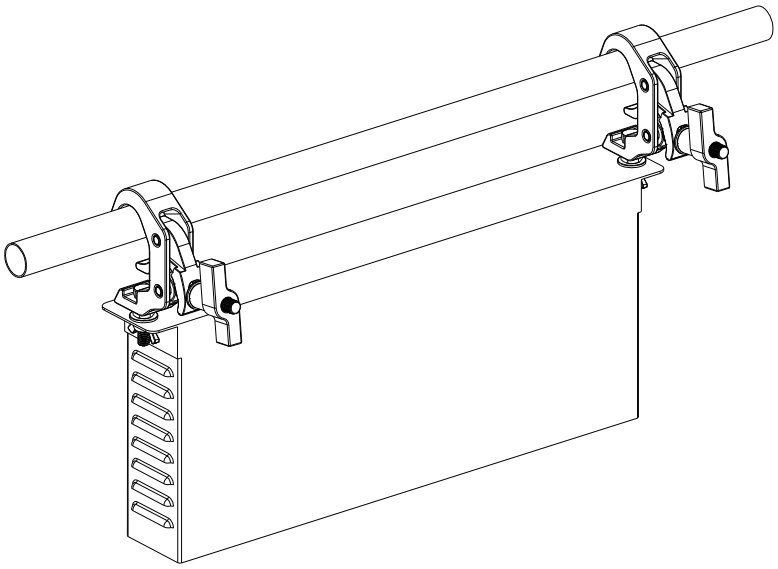
Power box (PSU-12001)

Power box installation:

Power box can be suspended on the truss.



Power box (PSU-22001)



Power box (PSU-12001)

08 Service and Maintance:

Figure 1 : Plug in-out design,easy to repair

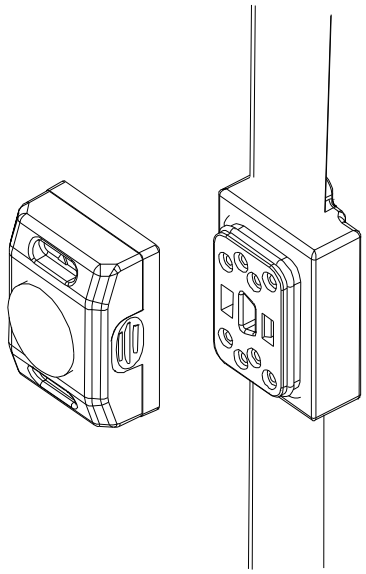
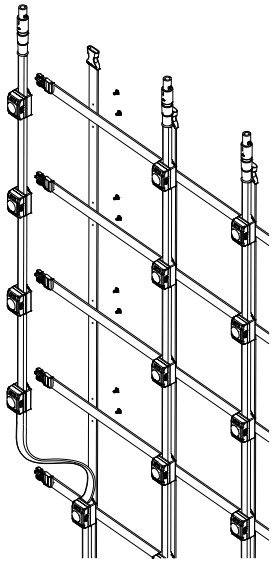


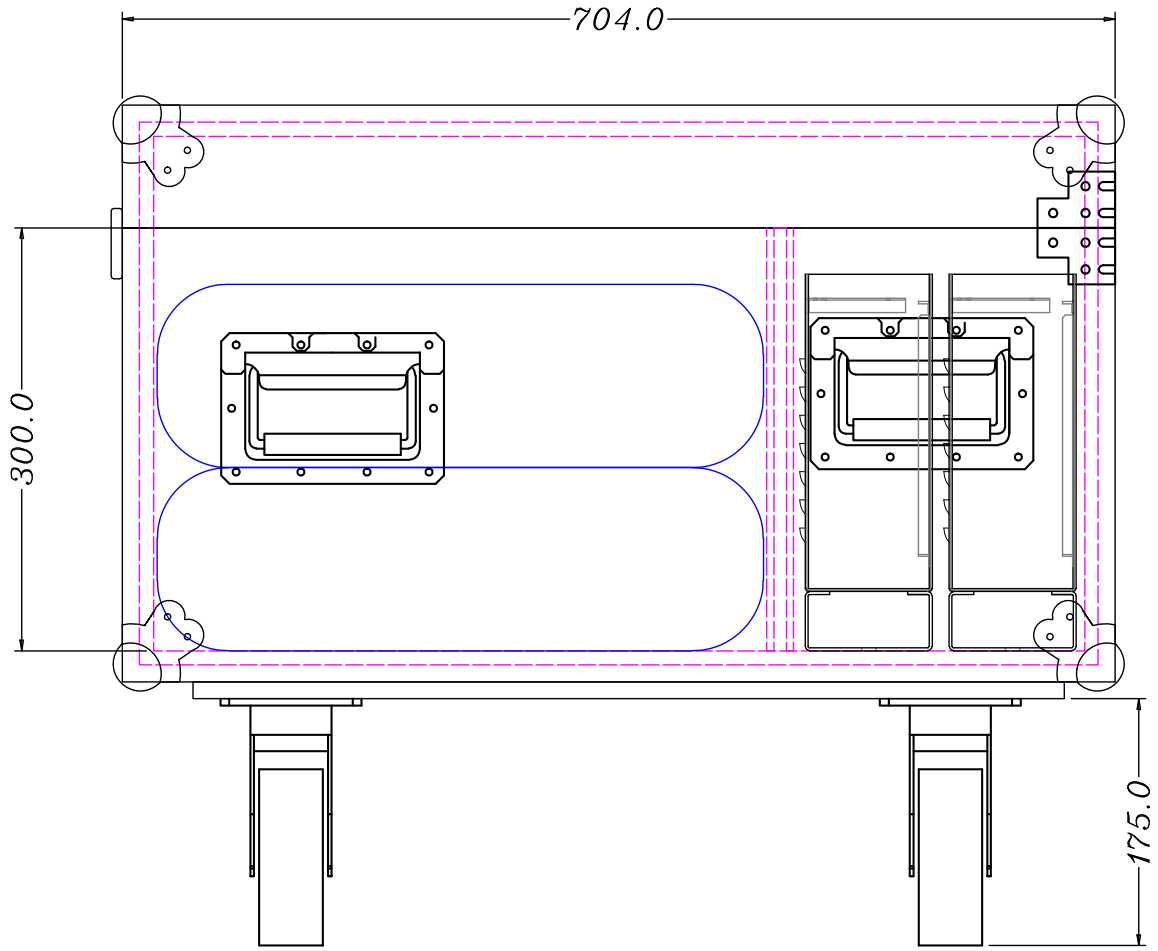
Figure 2 : Replacement of LED strips



Light status on the power box of Dot series

Light status on the power supply			
	Indicator light	Signal on receiving card	Power
Power supply	Red(Always),Green(Flicker)	OK	OK
	Red(Always),Green(Dim)	Signal failure	OK
	Red(Off),Green(Off)		Power failure
Problems on the Dot Screens			
	Phenomenon		Solution
Dot screen	Only one dot doesn't work.		Change this dot.
	Starting from the point,all the dots can't work.		1.Change the dot. 2.Change the dot in front of this. 3.Change the whole line

08 Package



ROE

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